

## Technical Skills

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- Programming Languages: Typescript, Ruby, Golang, Python, Java
- Backend Frameworks: NodeJS, Ruby on Rails, GraphQL, Sidekiq, Redis, ElasticSearch
- Frontend Frameworks: NextJS, ReactJS, TailwindCSS, MaterialUI, Hotwire, JQuery, Ajax
- Databases: MongoDB, MySQL, PostgreSQL, DynamoDB
- Cloud Management: AWS(S3, Lambda, Cloudwatch), Kubernetes(CKAD), Docker, Terraform

## Work History

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### UTHealth

Houston, TX, US

Scientific Programmer

Apr. 2024 - present

- Enabled comment and notification modules for 300 users to improve grant review workflows
- Enhanced dev environment and CI/CD pipeline with Docker, achieving 95% test coverage

### Snapshot

Chicago, IL, US

Software Engineer Intern

May. 2023 - Aug. 2023

- Implemented Ruby on Rails and React project to enhance user training team's efficiency
- Streamlined diverse data preparation with Sidekiq to enhance internal user experiences

### Shoptel

Taipei, Taiwan

Software Engineer

Jul. 2018 - Jul. 2022

- Improved server performance in product category page(>10k rps) with Flame Graph and enhanced it by more than 66% using memoization techniques when loading data in server
- Decoupled checkout process, accelerating the order checkout system by 30% with Sidekiq
- Increased maintainability in 3rd party payments with AWS Lambda for at least 100k DAU
- Integrated Facebook API in image system and promoted 10k clients to upgrade subscription

### Otto Software Partner

Taipei, Taiwan

Programmer

Aug. 2016 - Apr. 2018

- Integrated Jenkins into development flow to propelled the test coverage increase by 10%
- Acquired test-driven development skills using minitest and boost development efficiency
- Mentored three colleagues to onboard in daily e-commerce development process

## Side Projects & Class Projects

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Habicize | GITHUB: <https://github.com/bjchris32/habicize>

Jul 2024 - present

- Developed a full-stack MERN application in TypeScript, encouraging users to cultivate habits
- Integrated Docker for containerized MERN services, streamlining dev and CI/CD workflow

ML in Audio | GITHUB: <https://github.com/bjchris32/artificial-intelligence-lab>

Jan 2023 - May 2023

- Fulfilled speech tagging using Hidden Markov Model(HMM) based on Verterbi algorithm
- Identified music pieces with retrieval model based on Shazam music recognition algorithm

## Education

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### University of Illinois at Urbana-Champaign

Champaign, Illinois

Master of Computer Science

Aug.2022 - Dec 2023

### National Chung Hsing University

Taichung City, Taiwan

Bachelor of Computer Science and Engineering

Aug. 2012 - Jun. 2016